

A STUDY OF THE EFFECT OF SELF MONITORING IN A SOCIAL SKILLS GROUP  
OF BEHAVIORAL DISORDERED ADOLESCENTS

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## ABSTRACT

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### A STUDY OF THE EFFECT OF SELF-MONITORING IN A SOCIAL SKILLS GROUP OF BEHAVIORAL DISORDERED ADOLESCENTS

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The purpose of this study was to stress the importance of teaching social skills to behaviorally disordered youth. Although it has been demonstrated that social skills can be taught to this population, generalization remained problematic. Self-monitoring was used as a technique to promote generalization. This study postulated that social skills training and self-monitoring would increase the amount of positive statements the subjects made to their peers. The single system research design was used to examine the effectiveness of social skills training and self-monitoring as a treatment intervention. The results indicated an increase in the number of positive statements made by the subjects. The results are promising evidence on the impact of social skills training programs and promotes the use of self-monitoring as an intervention method with behaviorally disordered adolescents.

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## CHAPTER ONE

### INTRODUCTION

Self-management strategies have been proffered as effective means for improving children's academic skills and prosocial behavior (Roberts & Dick 1982). Self-managed students require less control by external agents. Concern that behavioral interventions possess social validity (Wolf, 1978) has led to increased use of self-management techniques as a means to promote self-reliant and independent individuals. Also self-management incorporates the use of self-mediated stimuli which Stokes and Osmes (1988) considered important for enhancing generality of behavior change.<sup>1</sup>

The use of self-management strategies rests on the assumption that individuals can apply any behavioral principle to change their own behavior. In practice, self-management involves at least two responses: (a) the response to be controlled, or the target response; and (b) the response to be emitted in order to control the target response. Both responses, the controlling response and the target response, must be arranged and emitted by the individual in order to qualify as self-management. For example, the student who uses the viewing of a favorite television program (controlling response) as a reward that affects the completion of a homework assignment (target response) is using self-management skills.<sup>2</sup>

Self-management involves the ability to apply behavior-change strategies in the regulation of one's own behaviors and contains four components: self-monitoring, self-instruction, self-assessment and self-reinforcement. Each component contains specific skills, such as goal setting and problem identification. In contrast to behavior-management

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<sup>1</sup> Samuel A. DiGangi and John W. Maag, "A component Analysis of Self-Management Training with Behaviorally Disordered Youth", Behavioral Disorders 17 (1992): 281.

<sup>2</sup> Ibid., p.282.

strategies developed and maintained by an external change-agent, self-management strategies are developed, evaluated, and reinforced solely by the individual.<sup>3</sup>

For the purpose of this study, the self-management component, self-monitoring will be the focus. Self-monitoring procedures are incorporated in treatments designed to increase both academic and social behaviors. Observing one's own behavior is a common event. Few persons, however, observe their own behavior in an organized, systematic fashion. More generally, they have a vague notion of their actions, often selectively remembering certain things and forgetting many others. Behavioral self-monitoring is one of the first and most important steps in self-control, because it provides the person with an ongoing record of the behavior to be controlled. The person not only notices certain behaviors but also keeps a written record of them. Without systematic data, the task of self-control is made extremely difficult if not impossible.<sup>4</sup>

Self-monitoring often has a reactive effect, which means, the behavior being observed is changed. In this way self-monitoring may serve as a self-controlling technique. As with any behavioral assessment procedure, accurate discriminations are enhanced by definitions of target responses. Specific dimensions of behavior (e.g. frequency duration, latency) are self-recorded. these recordings may be physically tangible, using data sheets, mechanical transducers or archival recordings. A main function of self-monitoring is that it increases positive behavior and decreases undesirable actions. This reactive property of self-monitoring has made the procedure especially attractive both to practitioners and to applied researchers interested in designing behavioral programs with maximum therapeutic effects.<sup>5</sup>

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<sup>3</sup> Belinda D. Lazarus, "Self-Management and Achievement of Students with Behavior Disorders", Psychology in the Schools 30 (1993): 67-70.

<sup>4</sup> Ibid., p. 72.

<sup>5</sup> Ibid., p. 74-76.



There are several frequently stated reasons for instigating client self-monitoring. They include the following: 1) A sufficiently extensive sample will be provided so that a baseline as to the frequency of the behavior or some important parameter of it can be obtained prior to treatment. Of course such baseline data is the necessary preliminary step to careful evaluation of the effectiveness of treatment. 2) Important information regarding those specific variables that control the targeted behavior will be obtained. Whenever possible some form of client-written records should be employed so that the client notes the time, places and specific conditions within which the targeted behavior occurs. This information as to controlling variables will provide the foundation upon which treatment planning can be based. 3) The client is trained to self-observe systematically and carefully those important covert and overt behaviors associated with the control problem. Self-monitoring permits the individual to identify ongoing behavior and to self-evaluate it in terms of standards or criteria previously learned. These self-evaluations would of course be placed on a continuum from very negative to very positive and would serve as the basis for self-directed feedback.<sup>6</sup>

Many clients fail to complete self-monitoring assignments, often because they are required to perform elaborate and time-consuming record-keeping tasks. Given that such clients have already demonstrated their inability to assert control over important classes of behavior, it makes sense that the often nonreinforcing, mundane activities of self-monitoring may prove to be a set of behaviors that they will avoid. To increase the probability of client self-monitoring, procedures should be systematically geared to clients and their ordinary life situations.<sup>7</sup>

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<sup>6</sup> Michael J. Mahoney and Carl E Thoresen, "Behavior Self-Control", Advances in School Psychology 2 (1982): 275-280.

<sup>7</sup> Ibid., p. 282-285.

Self-monitoring focuses on the individual and this gives the behaviorally disordered adolescent a basis for understanding his or her own behavior. An additional tool that will assist this individual with modifying their behavior is social skills training.

Social skill training may be one of the more effective treatment procedures in working with a variety of child and adolescent problems. Social skills training methods are based on the notion of competence, which suggests that problem behaviors should be viewed as deficits in a child's repertoire of responses. The treatment model based on this conceptualization focuses on the teaching of prosocial skills and competencies that are needed for day to day living, rather than on understanding and eliminating pathological responses.<sup>8</sup> Thus the emphasis is on teaching children how to respond effectively to new or difficult situations. The outcome is more positive consequences to their responses as compared to past behaviors that elicit negative consequences.

Social skills interventions have been developed and implemented with a range of populations including the mentally retarded, learning disabled, and behaviorally disordered. Children with behavior problems are particularly good targets for social skills interventions as their behavior interferes with successfully developing and maintaining positive relations with others. The focus of many social skills interventions is to increase the peer acceptance of the subjects involved. Since children with behavior problems display a number of behaviors that are disagreeable to their peers, it is not surprising that they are more frequently rejected and less accepted than their nonbehaviorally disordered peers.<sup>9</sup>

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<sup>8</sup> Nina Zaragoza, Sharon Vaughn, and Ruth McIntosh, "Social Skills Interventions and Children with Behavior Problems: A Review", Behavioral Disorders 4 (1991): 260-265.

<sup>9</sup> Peter J. Schloss, Cynthia N. Schloss, Constance E. Wood, and Wendy S. Kiehl, "A Critical Review of Social Skills Research with Behaviorally Disordered Students", Behavioral Disorders 1 (1986): 1-7.

A setting in which it can be readily seen that social skills training has a great deal to offer is the residential care of children and adolescents, since these are children who are generally perceived as learning new attitudes and behavior all the time, that is, even when the experience of learning is not deliberately structured. For this very reason, the ethical issues around the question of who is to benefit from any program of training are likely to be particularly sensitive and easy to overlook. Some practitioners feel that in some statutory institutions, closed units in particular, it is not possible for participation to be genuinely voluntary, and therefore they would not set up social skills training programs in such settings. This is of course, a special case of the more general questions of whether it is proper to use behavioral methods generally in a situation which the client has not entered of his own free will. Those who would oppose their use unequivocally seem to be arguing that any behavioral methods are equivalent to the use of supposedly irresistible behavior modification and that this amounts to unjustifiable manipulation and arbitrary social control. However, the experience of running social skills groups, albeit in a context of containment, will show that children are able even there to identify new behavior which they want to learn for their own sake and, in any case, they will not in fact continue to practice any new behavior they have learned unless they gain some advantage from doing so.<sup>10</sup>

A social skills program is incomplete without systematic programming for generalization and maintenance of the skills being taught. The special problems associated with behavior transfer and maintenance have been noted by several authorities (e.g., Chandler, Lubek & Fowler, 1992; Stokes & Baer, 1977; Stokes & Osnes, 1986). Teaching social skills is not a particularly difficult task; the challenge lies in getting students to use the newly acquired skills in appropriate situations. Several strategies exist for programming generalization, and self-management procedures have been considered promising. Although recent investigations show that self-management techniques following social skill instruction can promote behavior generalization, treatment effects may

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<sup>10</sup> Ibid., p.10-14

erode once the self-management procedures are removed. Therefore, specific generalizing tactics probably need to be implemented in addition to the original intervention procedures.<sup>11</sup>

Child development and children's social behaviors, in relation to social skills is a growing field. The trend among child studies takes research more into moralistic and altruistic directions and asks more questions about the size of the component behaviors studied. Flexibility in choice of social variables and components may throw additional light on some knotty issues in the general study of social skills and behaviorally disordered children.

### SIGNIFICANCE OF THE STUDY

It is important to stress that the severity of problems that may accrue due to social skill deficits is considerable. A person's ability to get along with others and to engage in prosocial behaviors determines popularity among peers and with teachers, parents and other significant adults. The degree of social skill is directly related to the number and type of prosocial acts performed by others toward the person evincing social behavior. Furthermore, this behavior has great impact in a number of areas. Social skills or the lack of them has been directly related to rates of juvenile delinquency, dropping out of school, later in life mental health problems and minimal adaptive functioning in adulthood.

It should be pointed out that these effects are not just for isolated cases; the magnitude of the problem is considerable. Gronlund (1969), for example found that 12% of children in normal classrooms reported having only one friend, while 6% of children

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<sup>11</sup> Johnny L. Matson and Thomas H. Ollendick, Enhancing Children's Social Skills: Assessment and Training (New York: Pergamon Press, 1988): 75-80.

reported having no friends at all. Hymel and Asher (1977) have replicated this study, with similar results. Related to these data are findings that social withdrawal, often defined as passive and slow in speech, has also been a frequently reported problem (Gottman, 1987; Patterson, 1974). Obviously these data provide reason for concern on the part of the professional.<sup>12</sup>

Unlike other problem areas, extremes in either direction can be evident with social skills. Aggression and behavior problems, as well as social withdrawal and isolation, are frequent with children. Behavior disorders are the most frequent reason for children, mostly males, being referred by school personnel to psychologists and social workers. Similarly, behavior disorders seem to be particularly resistant to treatment; often, the long-term prognosis is worse than what is seen with many severe forms of psychopathology.<sup>13</sup>

Children with behavioral disorders often demonstrate difficulties in interpersonal relationships, particularly peer interactions. For most children with behavioral disorders, the lack of adequate social skills, coupled with the presence of interfering behavior, such as aggression, appears to be the foundation for peer interaction problems. The bulk of social skill intervention research has focused on demonstrating that children with behavior disorders can acquire adequate social skills and reduce their display of behaviors that interfere with positive peer interactions.

It is evident from these problems that social skills are likely to effect a broad range of psychological response patterns. It seems then that attention is required from a variety

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<sup>12</sup> Rhonda J. Moore, Gwendolyn Cartledge and Kelly Heckaman, "The Effect of Social Skill Instruction and Self-Monitoring on Game-Related Behaviors of Adolescents with Emotional or Behavioral Disorders", *Behavioral Disorders*, 20 (1995): 253-255.

<sup>13</sup> Larry Michelson, Don P. Sugai, Randy P. Wood and Alan E. Kazdin, *Social Skills Assessment and Training with Children* (New York: Plenum Press, 1983), 7-12.

of professional disciplines to help remediate these very frequent social/interpersonal problems. Most certainly educators would be among those who should be acquainted with these problems and be involved with their solution. Similarly, clinical psychologist, social workers, school counselors, and child psychiatrists are likely to encounter these social skills deficits in almost every child with whom they have professional contact. Given the magnitude and severity of these problems, it would seem that social skill deficits should be seen not only as a major part of the underlying etiology of emotional, personality, and adjustment problems of children but as an area where efforts may have very beneficial effects as well. Therefore, not only will definitions of the problems and settings where these deficits be studied, but issues in the early identification of social difficulties needs to be discussed.<sup>14</sup>

#### PURPOSE OF THE STUDY

The purpose of this study is to assess the effects of direct social skill instruction and self-monitoring will have on the development and generalization of positive peer interactions between behaviorally disordered adolescents. Social skill instruction consist of role play, rehearsal, feedback, modeling and behavior transfer. Because we wanted the adolescents to be able to interact socially without the continual presence of a treatment provider, self-monitoring was also chosen as an intervention strategy. The placement of behaviorally disordered children in normalized environments points to the need for appropriate social behavior. Therefore, enhancing behaviorally disordered children's social interaction skills must continue to be an actively pursued topic.

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<sup>14</sup> Larry Michelson, Don P. Sugai, Randy P. Wood and Alan E. Kazdin, Social Skills Assessment and Training with Children (New York: Plenum Press, 1983), 17-19.

## CHAPTER TWO

### REVIEW OF LITERATURE

Educators and other professionals working with behaviorally disordered children and adolescents agree that these populations are characterized by the quantity and quality of their social interactions. More precisely, these youngsters tend to engage in nonproductive and inappropriate behaviors while infrequently demonstrating productive and adaptive social responses. The literature on behaviorally disordered children and the strategies and techniques of social skills and self-management will be presented in the following manner: (1) Theoretical Perspectives (2) Significant Studies, (3) Statement of the Hypothesis, (4) Theoretical Framework, and (5) Definition of Terms.

### THEORETICAL PERSPECTIVES

Several theories exist on the impact of treatment of behaviorally disordered children. Perhaps the most highly researched is the Operant Theory. The procedures of this theory is based on the research of B.F. Skinner. The basic principles of operant theory involve the focus on overt observable and definable behavior, identifying antecedent and consequent events, and continually applying reinforcement and punishment. The major statement of this theory emphasizes that behaviors can be modified. The operant approach has led to other methods to be considered due to the lack of generalization and the realization that the entire ecosystem in which a child lives must be considered if the most effective treatment is to be provided. Thus the theory of social learning is considered.<sup>15</sup>

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<sup>15</sup> Barry Schwartz, Psychology of Learning and Behavior (New York: W. W. Norton and Company, Inc., 1978), 2-5.

Social Learning Theory puts emphasis on modeling and role playing. The assumption is that social skills can be improved by observing and practicing various social interpersonal behaviors. The basis of social learning theory was established in the laboratory and was extensively tested with schizophrenics and mentally retarded adults. As a response criticism, the focus of this theory, where possible, is on the training of the family unit. Such an approach is important since the generalization of desired responses is greatly increased. Typical of this social learning approach to social skills training is the training model of Serna et al. (1986). These researchers worked on a number of interaction skills. Social learning methods are most effective in naturalistic settings. The more naturalistic the setting in which treatment is provided, the more powerful the treatment is likely to be.<sup>16</sup>

### SIGNIFICANT STUDIES

With the exception of a few early studies in the 1930s and 1940s, most research on social skills training with children has been conducted during the past 15 years. During this period of time more than 45 skill training studies have been published in over 75 different professional journals by authors working primarily in educational, clinical, developmental and pediatric settings. Perhaps due to the rapid growth of this field, the promise of social skill training as a solution to such childhood maladies as peer rejection, social isolation, and friendliness is accompanied by an array of issues and problems that require solutions in order for further progress to occur.<sup>17</sup>

Interest in social skill training with children is in part a response to research on the relationship between early peer experience and later social adjustment. Evidence

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<sup>16</sup> Barry Schwartz, Psychology of Learning and Behavior (New York: W. W. Norton and Company, Inc., 1978), 7-11.

<sup>17</sup> Luciano Abate L. and Michael A. Milan, Handbook of Social Skills Training and Research (New York: John Wiley and Sons Inc., 1985), 6-10.



concerning this relationship comes from both experimental research with primates and correctional studies with humans, and it has often been interpreted as support for the hypothesis that early peer isolation or rejection places children at risk for later social difficulties.

Several studies have been done that indicate that there is a relationship between early peer difficulties and subsequent mental health problems. In a retrospective study, Kohn and Clausen (1955) found that disturbed adults, as compared to a group of matched-normal controls, were more likely to describe themselves as socially isolated or friendless at age 13 or 14. Working with a large sample and a battery of measures first administered in the third grade, Cowen, Pederson, Babigan, Izzo and Trost (1973) found that classroom peer rejection was the best single predictor of subjects' tendencies to seek psychiatric assistance as adults 11 years later. Problematic peer relations may also be associated with mental health disorders during childhood.<sup>18</sup>

There are also other studies that suggest children who have trouble relating to peers are more likely to experience behavior or character disorders in adolescence and adulthood. Roff and colleagues (Roff & Sells, 1968; Roff, Sells & Golden, 1972) found that, among middle class boys who were rejected rather than accepted by peers in the third and sixth grades, were more likely to be identified as juvenile offenders. Finally, Janes and Hesslebrock (1978) used individual interviews to assess the interpersonal adjustment of adults who had been seen 9 - 15 years earlier in child guidance clinics and found that children who were described as withdrawn or antisocial toward peers in the clinic records had the poorest adjustment ratings as adults.<sup>19</sup>

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<sup>18</sup> Luciano Abate L. and Michael A. Milan, Handbook of Social Skills Training and Research (New York: John Wiley and Sons Inc., 1985), 6-10.

<sup>19</sup> Ibid., p. 6-10.

The notion that children with a history of poor peer relations are more vulnerable to later interpersonal disorders is the most frequently cited justifications for social skill training research. Therefore increasing the quantity and quality of children's peer interactions is the goal of the researchers.

A significant trend that has had impact on research has been the development of behavior-change techniques such as self-management. Empirical studies have shown self-management interventions to be effective in a) improving academic skills such as spelling, handwriting, and mathematics; b) decreasing maladaptive behaviors such as aggression, disruption, tardiness and anxiety disorders; c) increasing prosocial behavior; and d) improving the performance of teachers and school administrators.<sup>20</sup>

In self-management procedures, individuals learn to modify their own behavior. Such precedes, when effective, are highly desirable for use with behaviorally disordered adolescents, for adolescents often seek more autonomy from adults and need the skills to manage themselves as they contend with peer pressure and learn independence. There have been several studies that were conducted with adolescents. A self-management study was conducted over a three-year period by Brigham, Hopper, deArmas, Hill and Newsom (1985). The subjects were 103 middle school (sixth, seventh, eight grade) disruptive students. They were taught the principles of behavior analysis and how to observe and measure behavior. The primary focus was on teaching the students how their behavior affected others, and role-playing, modeling, study guides, and quizzes were used in the program. Multiple-baseline and clinical replication analyses indicated that the vast majority

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<sup>20</sup> J. Ron Nelson, Deborah J. Smith, Richard K. Young, and John M. Dodd, "A Review of Self-Management Outcome Research Conducted with Students who Exhibit Behavioral Disorders" Behavioral Disorders 16 (1991): 169-175.

of the participating students reduced their level of disruptive behavior and increased their ratings with teachers.<sup>21</sup>

Self-management techniques have also been used to modify other behaviors. For example, Osborne, Kiburz, and Miller (1986) decreased the self-injurious behavior of a behaviorally disordered adolescent by videotaping the subject and then using self-monitoring. Another self-management study, conducted with 21 institutionalized male adolescents, was based on cognitive-behavioral techniques for self-control of anger and aggression. The treatment subjects improved on several dependent variables such as self-control ratings by staff and more appropriate behavior during role-play conflict situations.<sup>22</sup>

In a 3-year longitudinal study, Shapiro (1989) investigated the impact of a self-management training program on the problem-solving and job-related social skills of three groups of adolescents with learning disabilities attending vocational schools. The problem-solving and social skills of each self-management group were reported as significantly improved in comparison to control groups of students with and without learning disability who were not trained to use self-management. Further, Shapiro also reported informal observations of generalization of self-management to other behaviors.<sup>23</sup>

The method that has been significantly investigated is self-monitoring. Not only has this method been utilized to increase both academic and social behavior in social skill training programs, self-monitoring also promotes maintenance and generalization. For example, Turkewitz, O'Leary and Ironsmith, (1975) combined a modified token program with self-monitoring to increase academic and social behavior of eight disruptive youth.

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<sup>21</sup> J. Ron Nelson, Deborah J. Smith, Richard K. Young, and John M. Dodd, "A Review of Self-Management Outcome Research Conducted with Students who Exhibit Behavioral Disorders" Behavioral Disorders 16 (1991): 180-181.

<sup>22</sup> Charles F. Mace, Kirby D. Brown, and Barbara J. West "Behavioral Self-Management in Education" Professional School Psychology 1 (1988): 162-163.

<sup>23</sup> Ibid., p. 170.

The skills were not generalized to a new setting and maintenance was observed only in the regular classroom across subject areas. In the Warrenfeltz, Kelly, Salzberg, Beegle, Level, Adams and Crosue (1981), study, four behaviorally disordered adolescents participated in a vocationally oriented social skills program. The first procedure consisted of didactic instruction and resulted in no concomitant, change in most of the student's interpersonal behavior in the generalization setting. A subsequent intervention, role-playing and self-monitoring was implemented and the targeted social skills generalized to the vocational training site. These findings suggest that self-monitoring facilitates maintenance and generalization of social skills trained following termination of the intervention.<sup>24</sup>

A particularly interesting and therapeutically useful feature of self-monitoring is its tendency to produce reactive effects. Reactivity of self-monitoring refers to changes that take place in the self-monitored response as a result of observing and recording one's own behavior. There is considerable evidence for reactive effects of self-monitoring across a broad range of subjects, settings and disorders.<sup>25</sup>

Another interesting study demonstrating the effects of self-monitoring was conducted by Broden, Hall and Mitts (1971). A trained observer monitored the behavior of two junior high school students to obtain a baseline rate of attentiveness for one student and a baseline rate of talking out for the other student. Subsequently, a self-monitoring procedure was implemented in which students were given sheets to keep data on the target behavior. One subject recorded attentive or inattentive behavior on the data sheet whenever she thought about recording. The other student monitored the frequency of talking out. With each subject, reversal conditions were included in the experimental design to demonstrate a functional relationship between self-monitoring and behavior. Self-

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<sup>24</sup> W.J. Kelly, C.L. Salzberg, S.M. Levy, R.B. Warrenteltz, T.W., Adams, T.R. Crouse, and G.P. Beegle, "The Effects of Role-Playing and Self-Monitoring on the Generalization of Vocational Social Skills by Behaviorally Disordered Adolescents" Behavioral Disorders 12 (1991), 174-176.

<sup>25</sup> Ibid., p. 178.

monitoring reliably altered behavior, that is, it increased attentiveness in one student and decreased talking out in the other student. These results were interesting because self-monitored data were not very reliable compared with records of an independent observer. This study provided an unambiguous demonstration of self-monitoring. Whenever self-monitoring was in effect, behavior changed dramatically.<sup>26</sup>

### STATEMENT OF THE HYPOTHESIS

If the behavior disordered adolescents in the social skills group understand the procedure of self-monitoring, they will use it to increase their frequency of making positive statements to peers. Therefore with the frequency of positive statements increasing, this will improve peer interactions among the adolescents.

### THEORETICAL FRAMEWORK

The theory from which this study is being presented is Cognitive-Behavioral Theory. Cognitive-behavioral theory grew out of traditional therapy, which in turn was an innovation from radical behavioral approaches to human problems. The major distinction between cognitive-behavioral and behavioral therapy is the incorporation of the mediation perspective into the cognitive behavioral approach to problems. This incorporation phenomenon occurred at different times with different cognitive-behavioral approaches, but occurred mainly in the end of the 1960's and early part of the 1970's. There were a number of theorist and therapist who clearly identified themselves as being cognitive-behavioral orientation. Some of the people to begin this process explicitly were Beck (1969, 1970), Cautela (1967, 1969), Ellis (1962, 1970), Mahoney (1974) and

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<sup>26</sup> C.S. Kiburz, Sidney R. Miller and Lonny W. Morrow, "Structured Learning Using Self-Monitoring to Promote Maintenance and Generalization of Social Skills Across Settings for a Behaviorally Disordered Adolescent", Behavioral Disorders 10 (1984), 28-30.

Meichenbaum (1973, 1977). Also, the creation of a journal specifically tailored to the emerging cognitive-behavioral field helped further this trend. Thus the establishment in 1977 of *Cognitive Therapy and Research*, with Michael Mahoney as editor, provided a forum to stimulate and communicate research and theory on the role of cognitive processes in human adaptation and adjustment.<sup>27</sup>

The cognitive-behavior approach is a loosely defined group of precedes which take into account more specifically internal events, primarily cognition. The notion is that these covert activities can be tapped in ways to enhance learning. Particular emphasis is placed on the child's active participation and the training of self-therapy via decision making, self-monitoring, and other self-regulation strategies. It should be emphasized that self-management strategies are one of the more highly emphasized of the cognitive strategies. Rehm (1977) focused on increasing rates of self-rewarding behaviors and decreasing rates of self-punitive behaviors. Specific procedures involve both direct contingency manipulation, and skills training in self-reinforcement. The emphasis of this treatment program involves specific training in self-monitoring, social skills training and conducting functional analyses outside of the treatment setting.<sup>28</sup>

Another method in cognitive behavior theory is the social problem-solving method. (Christoff 1985). The first phase of this method involves four social skills training sessions that focus on problem-solving. The aspects to be practiced in these sessions were a) recognizing a situation as a problem, b) defining the problem completely, c) generating multiple solutions, d) evaluating the probable negative and positive consequences of each solution, e) determining the best solution, and f) developing a plan for implementing the solution. The procedure just described was used for tasks such as joining a group

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<sup>27</sup> Keith S. Dobson, Handbook of Cognitive-Behavioral Therapies (University of British Columbia Press, 1988), 8-12.

<sup>28</sup> Ibid., p. 16-18.

conversation, igniting a conversation with a peer, requesting a peer to engage in a mutual activity, and making a request of an adult. The technique just described is based on the theory that behavior is influenced by processes such as perceptions, thoughts, beliefs, images and self-management. Perceptions, which have not been a focus of social skills treatment adolescents, are most certainly an area for future concern.<sup>29</sup> For example, a person who believes that people are friendly may initiate social responses such as greetings. The belief (cognitive process) leads to greeting and chatting with others, which in turn generates positive consequences for that person such as social reinforcement and other positive social consequences from others. Such results is the rationale for this study.

### DEFINITION OF TERMS

Social Skills: Those skills used to effectively interact with other people. Such skills can be verbal ones, or they can be nonverbal and cognitive.

Behavior Disordered: The inability to establish appropriate relationships with others and demonstrations of behaviors that fail to meet the expectation of others.

Generalization: The occurrence of relevant behavior under different non-training conditions without the scheduling of the same events in those conditions as had been scheduled in the training conditions.

Self-Monitoring: Observing one's own behavior in an organized and systematic fashion.<sup>30</sup>

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<sup>29</sup> Keith S. Dobson, Handbook of Cognitive-Behavioral Therapies (University of British Columbia Press, 1988), 25.

<sup>30</sup> Alan E. Kazdin, Behavior Modification in Applied Settings Third Edition (Illinois: The Dorsey Press, 1984), 97-108.

## CHAPTER THREE

### METHODOLOGY

The methodology section is organized in four sections: 1) Study design, 2) Sampling, 3) Data Collection procedure 4) Intervention strategy and plans.

#### STUDY DESIGN

This study answered an evaluative question through the use of an A-B design. According to Bloom, Fischer and Orme, the A-B design is often seen as the foundation of single-system designs because of their basic distinction between, and the combining of, a baseline observation period, A, and an intervention period, B. This basic single-system design is widely applicable to many types of problems and settings as well as to all levels of interventions. It is the "work-horse" of practice evaluations for several reasons. Foremost among these is that A-B designs can reveal clearly whether there has been a change in target events, providing both monitoring and evaluation information.<sup>31</sup> This information can provide the practitioner with insight, on-going events and determines whether to modify or terminate a particular intervention. As an evaluator, the A-B design provides information to the practitioner and to the client about outcome, and also provides information to the agency and to society at large.

A maintenance phase was also used in this study. This phase was used to monitor and reinforce the tasks achieved during the intervention phase. Bloom, Fischer and Orme recommended the development of a maintenance plan to ensure that the changes produced

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<sup>31</sup> Martin Bloom, Joel Fischer and John g. Orme, Evaluating Practice: Guidelines for the Accountable Professional Second Edition (Massachusetts: Paramount Publishing, 1995), 351.



by the intervention program are lasting changes. The maintenance phase involved the client in the monitoring progress and continued growth and success. This final phase of the intervention also allowed the subject to transfer the changes to their natural environment after the intervention was completed. The addition of the maintenance phase was also beneficial to the researcher.

The data obtained in this study is graphically displayed. According to Richard M. Grinnell Jr., data obtained from studies conducted following single system designs are presented in simple graphic format.<sup>32</sup> The data is displayed in a line graph, for the baseline phase and during treatment phase.

### SAMPLING

The subjects used in this study are five adolescents, two girls and three boys, ages ranged from 12 - 17. These adolescents are residents of a psychiatric residential treatment program. The adolescents have been categorized as behavior disordered due to their history of conduct disorder and personality problems. Conduct disorder is characterized by aggressive, hostile, and contentious behavior, and personality problems are characterized by anxious, withdrawn, and introvertive behavior. The subjects also have been diagnosed by DMS-IV as Opporsitional Defiant Disorder and Conduct Disorder on Axis 1. The subjects are presently members of a social skills group. The social skills group is a part of the daily schedule of the treatment program. The group consists of eight adolescent boys and eight adolescent girls. The groups meet one day per week for one hour. The boys and girls are placed into separate groups. The five identified subjects have been involved in the social skills group for the past year. They were chosen for this study due to their ongoing

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<sup>32</sup> Richard M. Grinnell, Jr., Social Work Research and Evaluation Fourth Edition, (Illinois: F. E. Peacock Publishers, Inc., 1993), 97.

problems in the following areas; 1) peer relationships, 2) social interactions, and 3) inappropriate language.

### DATA COLLECTION

The method used for collecting data during baseline, intervention and maintenance phases was frequency recording. Frequency recording involves counting the number of times a behavior occurs during a given period of time. To record frequency, the form, Recording Frequency of Occurrence of Behavior was developed from a sample from Bloom, Fischer and Orme.<sup>33</sup> This form was modified to collect data and was also used by the subjects for self-recording. These forms were chosen due to the simplicity of the design, which made data collection less complex for the subjects and the observers involved. Written on these forms were a list of positive and negative statements made to peers. These statements were gathered by questioning the subjects in line staff about statements that were heard or made daily. The use of positive statements has a target behavior was duplicated from the study titled "Positive Talk." Positive Talk is a social skills program that was effective in teaching delinquent youth conversational social skills. Emphasis of this study was making positive statements similar to some of the statements used in this study. The data was collected by 5 trained observers.

### INTERVENTION STRATEGY AND PLANS

Theoretically, social skill deficits that result from faulty learning can be remedied through instruction in specific components of social interaction, the effectiveness of this approach has been demonstrated for adults, socially withdrawn children and behaviorally

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<sup>33</sup> Martin Bloom, Joel Fisher and John G. Orme, Evaluating Practice: Guidelines for the Accountable Professional Second Edition (Massachusetts: Paramount Publishing, 1995), 145.

disordered children. Social Skills Training intervention in this research consisted of four components, a) Instructions b) Modeling c) Rehearsal and Practice and

d) Feedback. This social skills training package was described in the text Social Skills Assessment and Training with Children (1983).

Self-monitoring was implemented in a later phase to determine the separate effects of this instructional technique on maintenance and generalization across settings.

The intervention and strategy plans for this research will be described in three phases 1) Baseline 2) Intervention and 3) Maintenance.

### BASELINE PHASE

Before intervention was initiated, baseline data was gathered to determine the number of positive and negative statements the subjects verbalized to their peers. Data was collected in hourly intervals during three time periods of the day. These time periods were during the time of day when the subjects and their peers interacted the most. These periods of the day were the morning hours (6:30 AM - 7:30 AM), (7:30 AM - 8:30 AM), Lunch hour (12:00 PM - 1:00 PM) and during group therapy which was (4:00 PM - 5:00 PM). The trained observers counted the number of times during those hourly intervals, when positive and negative statements were made. The trained observers consisted of five staff members of the program. Each staff member was assigned one subject each to observe. The staff members were individually trained by researcher of this study. The staff members were instructed to count the frequency of positive and negative statements made during previous mentioned time periods. They were told to write on the forms statements that may not have been included on the data sheets. Data was collected for seven days

during this phase. The observers were instructed to use one data sheet a day to collect data on. A brief role-play of situations in which statements would be made was done. During this role-play, the observers were asked to record data. The data was reviewed and the observers were allowed to ask questions about the data they were collecting.<sup>34</sup>

### INTERVENTION

Training took place in a classroom during two 45 minute sessions of social skills training. The social skills training consisted of four components, a) Instruction b) Modeling c) Rehearsal and Practice d) Feedback e) Self-Monitoring. Each will be described below;

### INSTRUCTIONS

The initial step in social skills training is to convey information about the requisite behaviors. Instructions were provided to specify in concrete terms exactly what behaviors are required and how they should be performed. For example, the subjects were asked to present situations they may encounter during the time periods data is being collected (morning, lunch and group). The subjects were then explained to that the group would be focusing on being more positive to another. They were told that a way to be more positive is to make positive statements. The subjects were then asked to state some positive statements they make during the day. The subjects were then presented with specific positive statements they could make.

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<sup>34</sup> Sarup R. Mathur and Robert B. Rutherford, Jr., "Teaching Conversational Skills to Delinquent Youth" Behavioral Disorders 19 (1994): 296.

## MODELING

While instructions may be useful as an initial step in describing the requisite behaviors, modeling provides direct examples of social skills. The facilitator and his co-leader illustrated the exact behavior they wanted the subjects to perform. For example, they modeled positive statements they could make to each other during the morning hours, (good morning, thank you). The advantage of modeling is that it depicts, in vivid detail, the complete social response and can convey more information than is possible through verbal means alone.

## REHEARSAL AND PRACTICE

After information and explanations have conveyed the types of responses that the child should perform, the child must rehearse the appropriate skills. The rehearsal and practice by the group members and the identified subject was exemplified several times. Rehearsal and practice of making positive statements to another peer during each time period was done. Each subject was able to place themselves in a particular situation they sometimes encounter during those time periods.

## FEEDBACK

Feedback consists of providing information about how well the response was performed. Detailed information can be provided to convey what aspect of the response was performed correctly, what could be improved, what might be done differently, and so on. After the subject rehearsed making positive statements, the facilitator and subject discussed the performance. Also providing feedback were other members of the group. The feedback provided was used as the basis for rehearsing making positive statements again.

### SELF-MONITORING

The subjects were also taught the skill of self-monitoring in the same fashion as the targeted social skill components. The facilitator began by providing instructions of self-monitoring, followed by modeling, rehearsal and practice and feedback. The subjects were then provided the self-monitoring sheet mentioned earlier. The facilitator asked the subjects to take the self-monitoring sheets with him at the beginning of each day and to record, by marking down each time he or she made a positive statement during the day. This self-monitoring was done for seven days. All staff members and employees of the program were informed that the members of the social skills group would be monitoring his and her own behavior. The employees and staff members were informed by a written memo. The memo asked them to say to members of the group when encountering them "How's your data sheet coming?" and then would ask to see it.

Only positive feedback would be given to the group member. The employee or staff member would then walk away. The memo that was written is an example of an attempt to program generalization by using the technique common social stimuli. A common social stimuli is any stimulus (staff members, employees) that is normally and frequently present in the many settings generalization is desired. Common social stimuli was incorporated to help increase incident of making positive statements. By involving significant adults who are present in the subjects natural setting, it was an assumption that the adults would reinforce generalization responding of positive statements.

### MAINTENANCE PHASE

The week following implementation of the intervention began the maintenance phase. The maintenance phase consisted of ending intervention and the continuation of the subjects making positive statements. The trained observers continued to collect daily data

of the frequency of positive statements made. Although the subjects will continue to attend social skills training, the focus will not be on making positive statements. Also the subjects will no longer carry the data sheets along with them during the day for self - monitoring.

## CHAPTER FOUR

### PRESENTATION OF RESULTS

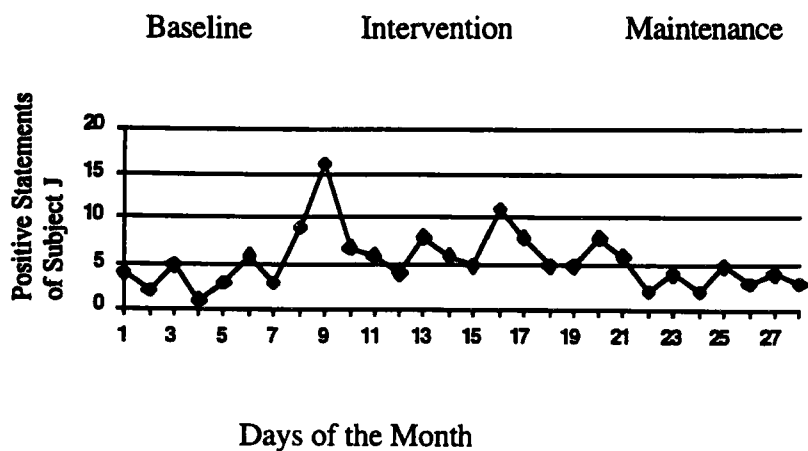
The study began with five subjects but was reduced to two due to several difficulties. First the two female subjects that were identified were dropped from the study. This occurred because of inconsistent data gathering by the trained observers. Also, data sheets were lost or misplaced, resulting in several missing days of data collection. Secondly, the male subject not used in the study was relocated to another treatment unit. Therefore the subject was unable to participate in the two training sessions.

#### POSITIVE STATEMENTS FOR SUBJECTS J & K: BASELINE, INTERVENTION, MAINTENANCE

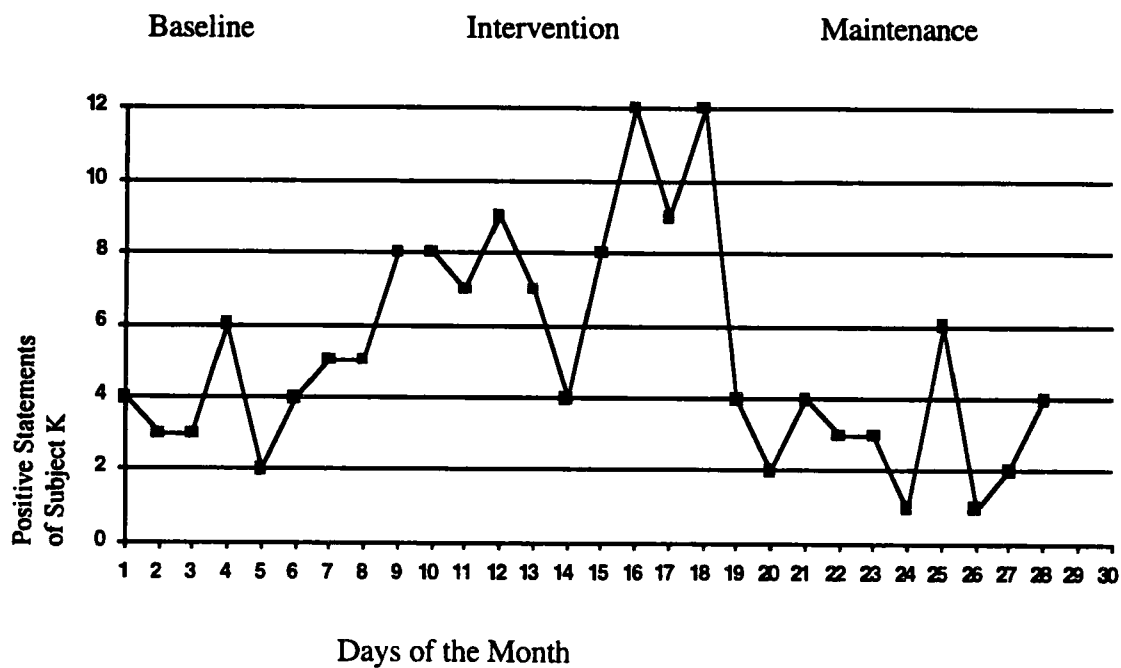
Figures 1 and 2 display the frequency of positive statements made by the subjects during a 28 day period. The subjects are identified as Subject J and Subject K. Figure 1 illustrates the frequency of positive statements made by Subject J. Figure 2 illustrates the findings of Subject K. The twenty-eight day period is separated into three phases, baseline, intervention and maintenance. The baseline phase lasted 7 days, intervention 14 days and maintenance 7 days.



**FIGURE 1**  
Subject "J"



**FIGURE 2**  
Subject "K"



In Figure 1 it is illustrated that during the 7 day baseline period, Subject J made a total of 24 positive statements. In Figure 2 it illustrates during this same time period, that Subject K made a total of 27 positive statements. The intervention of social skill instruction and self-monitoring began on Day 8 for both subjects. In Figure 1 it is illustrated that from Day 8 through Day 14, Subject J made 56 positive statements, which is an increase of 62.5% more positive statements made since baseline. In Figure 2 it illustrates during this same time period, Subject K made 48 positive statements, an increase of 43%. During the second week of intervention (days 15-21) Subject J made a total of 48 positive statements (see Figure 1), an increase of 57% since baseline. In Figure 2, it is illustrated that Subject K made 54 positive statements an increase of 50%.

Data was also taken during the intervention phase by each subject. Subject J and Subject K recorded the number of positive statements they made on the self-recording form. Subject J's data sheet indicated he recorded a total of 12 positive statements during intervention. Subject K recorded a total of 14 positive statements. Each total is significantly lower than what was reported by the trained observers during baseline.

During the maintenance phase (days 22-28), Subject J made 23 positive statements, which was a return to the baseline level. Subject K had similar results during the same time period. Subject K made only 20 positive statements, also a total lower than the baseline total.

The data demonstrates clearly an increase of positive statements during intervention. The data also demonstrated the difficulty this population had with recording and making positive statements consistently on a daily basis. The collected data points often varied each day. Also, in Figure 1, and Figure 2 the data demonstrates that on days 9 and 16,

which is one day after implementation of the intervention, a significant increase of positive statements were made.

### LIMITATIONS OF THE STUDY

There are a number of limitations in this study. First, the self-monitoring skill required that the subjects be able to consistently distinguish when they made positive statements. The subjects are behaviorally disordered, in addition they had other maladaptive disorders. Due to their level of functioning, they had some difficulty making that distinction, which is essential for self-monitoring to be effective. Second, the self-recording form used for self-monitoring, was not properly completed during the periods of the day requested. The subjects were generally off-task and inconsistent in completing the forms.

Although all the subjects in the study responded in the same general way to the intervention procedures, there was variability in how fast the effects occurred. Inconsistency in the effects of self-monitoring procedures leads to the question of why self-monitoring is sometimes effective.

The issue of generalization was also paramount in the study. There was an assumption that the natural contingencies that were supportive of the subjects would be cooperative and reinforce the subjects to make positive statements outside of the training sessions. But the method that was used to promote generalization was not performed with any regularity. Therefore, when doing future research, closer examination of the issue of generalization is needed. Also, in order to address these issues, a more extensive analysis of the youth and their environment is required.

Time constraints also placed limits on the study. This researcher at first, did extensive research in the area of self-instruction. But during subsequent training sessions with the youth this self-instruction was deemed insufficient for this population due to the necessary cognitive skills needed. The development of cognitive skills would have required more training sessions. Therefore, not having the luxury of conducting the sessions needed, precipitated the change of focus to self-monitoring.

Also the structure of the residential program contributed to the limitations of time. Training sessions were allowed to be scheduled for only one day a week. Additional sessions during the week would have provided time for more instruction and continuity of the intervention.

This study has proven that not enough time and planning occurred to really test the intervention. Possibly under different circumstances time would not have been a factor. But we really can't make that judgment because the limitations significantly effect the results.

## CHAPTER FIVE

### SUMMARY CONCLUSION

The findings of this study does not clearly suggest whether social-skills training is or is not an effective intervention strategy with behaviorally disordered adolescents. The goal, at the commencement of this study, was to increase the positive statements the subjects made to their peers. This was achieved during the intervention phase but only slightly during the maintenance phase. The incidents of positive statements returned to the baseline level once the intervention was terminated. Yet, the fact that a relatively short-term intervention was effective in producing some changes that were noticeable for at least two weeks indicated the potential effectiveness of the intervention.

If we focus on the possibility of the intervention being effective, the results indicate that the self-monitoring of interpersonal responses can be an effective intervention for adolescents with behavior disorders. Traditionally, programs for these students have relied on management of behavior by external control agents. However, there are numerous problems associated with externally managed programs, and viable alternatives are needed which more directly involve the adolescents in the behavior change process. Results support the use of the self-monitoring procedure used in this study. This procedure, as well as other self-control procedures, provides adolescents with tools for regulation of their own social behaviors.

In conclusion, for researchers, it is imperative that we take time to learn the methods associated with conducting an effective research study. We then can be sure to structure our studies in a way that are valid and reliable. Without this we can't be sure that interventions are effective.

### IMPLICATIONS FOR SOCIAL WORK

Social skills training is being increasingly used as a treatment method in working with children and adolescents. Teaching a young person social skills is a direct method of influencing how that young person is likely to interact with others in the future. The goal is to teach people the skills needed to sustain social interactions that will lead to positive outcomes.<sup>35</sup>

Social work practitioners have found that social skills training is an appropriate method for helping many different young people with a variety of problems. During adolescence many skills are needed by all young people, not just those in trouble. Many social work practitioners have used social skills training programs for prevention as well as treatment. For prevention, all young people can be offered a generic program of social skills training or young people identified as at risk can be offered a social skills program. More troubled youth with specific difficulties such as behavior disorder, can be thought of as having a deficit in certain skills and can be taught these skills to remedy their deficits.<sup>36</sup>

This study has shown that social skills training and the self-management technique of self-monitoring cannot be used successfully with behavior disorder children. Since social skills training concentrates on realistic and daily confronted situations, its impact produces immediate results. The subjects' active role in the program, provides the subject with the opportunity to observe and participate in progress. The intervention program can

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<sup>35</sup> Craig W. LeCroy, Handbook of Child and Adolescent Treatment Manuals (New York: Lexington Books, 1994), 126.

<sup>36</sup> Armando Morales and Bradford W. Sheafor, Social Work, A Profession of Many Faces (Boston: Allyn and Bacon, M Inc., 1986), 10.

be structured to meet the subject's needs, placing emphasis on the issues that are most detrimental to the subject.

Finally, social skills training and self-monitoring is advantageous to the social work practitioner as an intervention due to the flexibility in structure and the creativity of the intervention package. Further use of social skills training and self-monitoring techniques with behaviorally disordered children is needed to determine the effectiveness of the program with such a population, but when coupled with the wealth of research on similar populations, social skills training and self-management programs appear favorable.

#### RECOMMENDATION FOR FUTURE USE

It is recommended that practitioners not use this study. The study did not determine whether self-monitoring in a social skills group of behavior disordered youth increased positive statements. The study suggests that self monitoring is an intervention that should be closely evaluated in the future when addressing the needs of this population. It is recommended that researchers continue to look into whether the intervention can be effective in other settings that provide treatment to behavior disordered youth.

## APPENDIX



APPENDIX A  
Self-Monitoring Form Used By Subjects

Positive Statement	6:30-7:30 AM	7:30-8:30 AM	LUNCH	GROUP
"Hey", "Hi," "What's Up?"				
"Thank you"				
"How do you feel?"				
"Excuse me"				
"Please"				
"You look nice"				
"Can I help?"				
"Are you okay?"				
"Calm down"				
"Good job"				

## Frequency Recording Form Used By Trained Observers To Record Positive Statements

[illegible]

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